



July 5, 2005

Messrs. Joseph Shepherd &
David Burns
Massachusetts D.E.P. S.E.R.O.
20 Lakeside Drive
Lakeville, MA
02347

Mr. Steven Couto
U.S. E.P.A.
One Congress Street
Suite 1100 (SEW)
Boston, MA
02114-2023

Re: New NPDES Total Phosphorus Limit of 0.2 mg/l

Gentlemen:

The Brockton AWRF currently does not have the means for multiple point chemical dosing for Phosphorus removal to meet the new limit of 0.2 mg/l. The current Phase 2 design which will begin construction late this year or early next will be addressing the required multiple point dosing and secondary effluent filtering in order to achieve the new 0.2 mg/l limit.

Attempting to get down to the 0.2 limit now utilizing our only available dosing points would most likely cause an upset to the biological process due to creating a nutrient deficient situation.

We had considered the possibility trying totes throughout the plant at the various locations for chemical addition but consider this to be a potential environmental disaster due to the logistics of containment as well as Phase 1 construction being in full swing. With this construction many vehicles and equipment are moving throughout the AWRF making it fairly impossible to fully protect any chemical totes from damage or compromise.

There are presently no chemical feed lines to the South Aeration basins.

It is our hope that both EPA and MADEP will accept the plan we hope to implement until such time as the new multi-point chemical feed system is constructed in Phase 2 of the AWRF upgrade.

The Plan

- Continue as is, which is to remove enough Total Phosphorus utilizing our current existing application points and dosage rates at the head of the primary clarifiers to a level not to cause a nutrient deficient situation at the biological process.
- In order to get an idea on both the amount of increased sludge production and Ferric Chloride dosing requirements when attempting to achieve a 0.2 mg/l of total Phosphorus after the Phase 2 construction is complete, pending your approval, we are planning to target the 0.2 mg/l limit on the North Aeration system. The required chemical feed lines are already in place on that part of the system.

- We will treat the sludge prior to our centrifuge to reduce the amount of phosphorus in the recycle streams. The Phosphorus levels in the centrate can run as high as 200 mg/l. At a rate of 100,000 gallons per day of sludge dewatering, this can represent a significant portion of our overall Phosphorus loadings. In removing it from the side streams, we will be able to lessen the overall impact on our primary and secondary treatment systems.

Should you require further information or clarification, please feel free to contact me at your earliest convenience. If our plan is acceptable to you, please provide us with a written approval letter for our files.

Thank you for your timely reply gentlemen.

Sincerely,

James Lauzon
Project Manager, VWNA
Brockton AWRF

cc: Michael Thoreson, Brockton DPW Commissioner
David Norton, Brockton Water & Sewer Contract Admin.
Farzin Kiani, Area Manager, VWNA

